
ABB INDUSTRIAL DRIVES

DCS880, 20 A to 5200 A for safe productivity



Creating a safer environment without compromising productivity

DC drives

The all-compatible drives are designed to provide customers across industries and applications with unprecedented levels of compatibility and flexibility.

Our DCS880 industrial drives are customized to meet the precise needs of industries such as oil and gas, mining, metals, cement, non motoric, material handling, pulp and paper, rubber and plastics, marine, water and wastewater, food and beverage and automotive. They control a wide range of applications such as cranes, extruders, winches, winders, conveyors, mixers, millstands, centrifuges, test benches, elevators, electrolysis, kiln.

DC motor control

ABB's motor control technology provides precise speed and torque control for all applications.



Adaptive programming

Adaptive programming is ideal for creating simple control programs for various applications. It does not require expertise in programming and is offered as a standard in all-compatible drives.



Removable memory unit

Stores all the software and parameter configurations in an easily replaceable and simple-to-install module.



All typical DC configurations

DCS880 standard firmware supports all standard configurations present in DC drive applications such as 6-pulse, 12-pulse parallel, serial and serial sequential, 24-pulse, M3, M6 and field reversal.



Remote monitoring

With a built-in web server, NETA-21 makes worldwide access easy for industry applications.



Drive-to-drive link

Allows fast communication between drives including master-follower configurations as standard.



Safety

DCS880 offers safe torque off (STO) built in as a standard. It can be used in safety functions up to SIL3 / PLe enabling you to achieve every safety requirement.



Drive application programming

Customizable to meet the precise application needs based on IEC 61131-3. Uses the same programming environment and is also easy to integrate with other ABB components such as PLCs and HMIs.



Drives going mobile

We offer several smartphone applications to ease and enhance the use of ABB drives. These tools provide a user-friendly and easy-to-use approach for the commissioning, servicing and use of ABB drives.



Intuitive human-machine interface

User-friendly, high-contrast and high-resolution display enabling easy navigation in multiple languages. Allows USB and Bluetooth connection.



Startup and maintenance tool

Drive composer PC tool for drive startup, configuration and daily use and process tuning. PC tool is connected to the drive via Ethernet or USB interface.



Communication with all major automation networks

Fieldbus adapters enable connectivity with all major automation networks.



Flexible product configurations

Drives are built to order with a wide range of options. Ready made cabinets with or without transformer are available up to 20 MW.



Extended connectivity

In addition to the standard interfaces, the drive has three built-in slots for additional input/output extension modules and speed feedback interfaces.



Ratings, types and voltages

Current ratings, dimensions and weights

Unit	2-Q	4-Q	Supply voltage [V _{AC}]								Weight	Dimensions	
size	rated Current	rated Current											
	DCS880-S01	DCS880-S02											
	I _{DC} [A]	I _{DC} [A]	400	500/525	600	690	800	990	1190	[kg]	h x w x d [mm]	h x w x d [inch]	
H1	20	25	●	●						11	370 x 270 x 215	14.56 x 10.63 x 8.46	
	45	50	●	●									
	65	75	●	●									
	90	100	●	●									
H2	135	150	●	●						16	370 x 270 x 271	14.56 x 10.63 x 10.67	
	180	200	●	●									
	225	250	●	●									
	270	300	●	●									
H3	290	320			●					25	460 x 270 x 317	18.11 x 10.63 x 12.48	
	315	350	●	●									
	405	450	●	●									
	470	520	●	●									
H4	590	650			●					38	645 x 270 x 352	25.39 x 10.63 x 13.86	
	610	680	●	●									
	740	820	●	●									
	900	1000	●	●									
H5	1190	1190	●	●						55	750 x 270 x 372	29.53 x 10.63 x 14.65	
H6	900	900			●	●				110	944 x 510 x 410	37.17 x 20.08 x 16.14	
	1200	1200	●	●									
	1500	1500	●	●	●	●							
	2000		●	●	●	●							
		2000	●	●									
H7	1900	1900					●			180	1750 x 460 x 410	68.90 x 18.11 x 16.14	
	2050	2050		●	●	●							
	2500	2500	●	●	●	●	●						
	3000	3000	●	●	●	●	●						
H8	2050	2050						●		315	1750 x 760 x 570	68.90 x 29.92 x 22.44	
	2600	2600						●	●				
	3300	3300	●	●	●	●	●	●	●				
	4000	4000	●	●	●	●	●	●	●				
	4800	4800			●	●	●						
	5200	5200	●	●									



H1, H2

H3

H4

H5

H6

H7

H8